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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,225	11/03/2003	Michiel van Nieuwstadt	81088302	3076

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EXAMINER

NGUYEN, TU MINH

ART UNIT PAPER NUMBER

3748

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

2P

**Office Action Summary**

Application No.

10/700,225

Applicant(s)

NIEUWSTADT, MICHEL VAN

Examiner

Tu M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 March 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 24-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24 is/are allowed.
- 6) ☒ Claim(s) 25-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 032405.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. An Applicant's Request for Continued Examination (RCE) filed on March 24, 2005 has been entered. Overall, claims 24-32 are pending in this application.

#### ***Drawings***

2. The formal drawings filed on March 24, 2005 have been approved for entry.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 25-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Kusumoto et al. (Japan Publication 10-77825).

Re claims 25, as shown in Figure 1, Kusumoto et al. disclose an emission control system coupled downstream of an internal combustion engine, comprising:

- a first device (108);
- a second device (110) coupled upstream of the first device;
- a sensor (120) coupled upstream of the second device; and

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- a computer storage medium (122) having a computer program encoded therein, comprising code for regenerating the first device based on a signal provided by the sensor (120) coupled upstream of the second device.

Re claim 26, in the system of Kusumoto et al., the internal combustion engine is a diesel engine (102).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kusumoto et al. as applied to claim 26 above, in view of Domesle et al. (U.S. Patent 4,515,758).

Re claim 27, the system of Kusumoto et al. discloses the invention as cited above, however, fails to disclose that the second device is an oxidation catalyst.

As indicated in the Abstract, Domesle et al. teach that it is conventional in the art to include an active substance comprising an oxidation catalyst on the inlet side of a particulate filter to reduce an ignition temperature of soot. It would have been obvious to one having ordinary skill in the art at the time of the invention was made, to have utilized the oxidation

catalyst taught by Domesle et al. in the particulate filter (108) of Kusumoto et al., since the use thereof would have saved fuel by reducing an ignition temperature of trapped particulate matter.

Re claim 28, in the modified system of Kusumoto et al., the first device is a diesel particulate filter (108).

Re claims 29-30, in the modified system of Kusumoto et al., the signal provided by the sensor (120) coupled upstream of the oxidation catalyst is indicative of an exhaust gas pressure upstream of the diesel particulate filter, wherein the sensor (120) is an absolute pressure sensor.

Re claim 31, in the modified system of Kusumoto et al., the code for regenerating the particulate filter (108) is further based on an atmospheric pressure (see paragraph 0058).

7. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusumoto et al. in view of Domesle et al. as applied to claim 31 above, and further in view of Figueras et al. (France Patent 2,808,559)

In the modified system of Kusumoto et al., the atmospheric pressure is calculated from the absolute pressure sensor (120) when the engine is not running. Thus, Kusumoto et al. fail to disclose that the atmospheric pressure is calculated based on a Manifold Absolute Pressure sensor reading during vehicle start.

As shown in Figure 1, Figueras et al. teach a control system to evaluate the pressure difference across a particulate filter (4) by using an absolute pressure sensor (10) located upstream of the particulate filter and a manifold absolute pressure sensor (6) to detect an atmospheric pressure during engine start-up. It would have been obvious to one having ordinary skill in the art at the time of the invention was made, to have utilized the absolute pressure sensor

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taught by Figueras et al. in the modified system of Kusumoto et al., since the use thereof would have timely regenerated the particulate filter by accurately determining a pressure difference across the filter.

***Allowable Subject Matter***

8. Claim 24 is allowed.

***Prior Art***

9. The IDS (PTO-1449) filed on March 24, 2005 has been considered. An initialized copy is attached hereto.

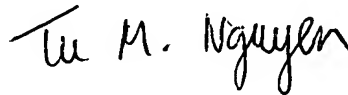
***Communication***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tu Nguyen whose telephone number is (571) 272-4862.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas E. Denion, can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



TMN

Tu M. Nguyen

April 3, 2005

Primary Examiner

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